

**GENERATING A SPLIT POWER PLANE OF A
MULTI-LAYER PRINTED CIRCUIT BOARD**

ABSTRACT

Methods and apparatuses generate a split power plane for a multiplayer printed circuit board (PCB). An aspect of the invention supports the generation of a split power plane by constructing wireframes corresponding to each of the power voltages. If a crossover between different voltage wireframes exists, at least one of the voltage wireframes may be modified in order to eliminate the crossover. With another aspect of the invention, a trace layout, corresponding to the wireframe, is constructed in accordance with electrical current requirements, *e.g.* average electrical current and peak electrical current, of the associated components. With another aspect of the invention, a plane that contain the traces that associated with a power voltage may be enhanced by increasing the associated area of the layout in accordance with the available area of the split power plane. The enhancement of a plane may be prioritized in accordance with peak electrical current that is associated with the plane.